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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,089

02/06/2007

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038919.57625US

7432

23911 7590 11/09/2010  
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EXAMINER

JOYCE, WILLIAM C

ART UNIT

PAPER NUMBER

3656

MAIL DATE

DELIVERY MODE

11/09/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/576,089	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> William C. Joyce	<b>Art Unit</b> 3656	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 and 6-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,5 and 11-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office Action is in response to the Election filed June 23, 2010 for the above identified patent application.

#### ***Election/Restrictions***

1. Claims 2-4 and 6-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on June 23, 2010.

#### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Sakamoto (JP 2003-120703).

Referring to Figure 5, Sakamoto illustrates a prior art wheel hub device comprising: one track ring out of a stationary ring and a rotary ring is an outer

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ring (2) having a plurality of outer ring tracks on the inner peripheral surface thereof; the other track ring of the stationary ring and the rotary ring is an inner ring assembly (3) comprising a shaft member and an inner ring as a separate body combined with each other and having a plurality of inner ring tracks on the outer peripheral surface thereof; the shaft member is formed with one of the inner ring tracks in a middle part in the axial direction thereof and a small-diameter step portion (20) having a smaller diameter than that of the inner ring track portion at an end portion in the axial direction thereof; and said separate inner ring has the other of the inner ring tracks on the outer peripheral surface thereof and is fitted on said small-diameter step portion, which hub unit comprising: a sensor holder (25) fixed to the stationary ring of the hub unit for a driving wheel; a sensor (8) supported by said sensor holder and facing an encoder (7) fixed to said rotary ring to rotate together with said rotary ring; and a harness or connector extended out of said sensor for taking out a detection signal of the sensor, wherein: the sensor unit includes said sensor and said harness or connector; all of the portions of said sensor unit provided which are outside the outer ring in the axial direction and inside a range of a hub unit mounting hole of a knuckle (1) are disposed on the inner side in the radial direction than an inner wall of the hub unit mounting hole of the knuckle; said harness or connector is disposed on the outer side in the radial direction in a non-contact manner with a constant velocity universal joint (22) in a finished car; said sensor is an active sensor; a sensing portion of said sensor directly faces said encoder without

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interposition between it and said encoder; and said harness or connector is extended out of a gap between said knuckle and said constant velocity universal joint.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 11-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sakamoto (JP 2003-120703), as applied to claims 1 and 5 above, and further in view of Dougherty et al. (USP 5,470,157).

Sakamoto does not teach the sensor attached to the sensor holder with a screw. Referring to Figure 5, Dougherty et al. illustrates a sensor (74,76) connected to a sensor holder with a plurality of screws (82). Sakamoto illustrates in Figure 5 the sensor holder (25) formed integrally with a resin seal member (11). Alternatively, Figure 2 of Dougherty et al. illustrates the sensor holder (38) formed integrally with a resin seal member (68). It would have been obvious to one of ordinary skill in the art at the time the invention was made to attach the sensor of Sakamoto with a plurality of circumferentially spaced screws, as taught by Dougherty et al., motivation being to a modular sensor assembly that is easily assembled and disassembled.

With respect to the material used in forming the sensor assembly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the sensor holder of metal, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William C. Joyce whose telephone number is (571) 272-7107. The examiner can normally be reached on Monday - Thursday 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/William C. Joyce/  
Primary Examiner, Art Unit 3656